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Some Observations on the Soundness of the Clydesdale Horse*

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CARLISLE

When your Secretary asked me to read a paper to this branch, my first reaction was to decline to accept, as you will all understand how difficult it is in these busy days to find the time to compose a paper worthy of presentation to you.

However, there is one subject which I consider is urgently in need of discussion—that is, the soundness of the Clydesdale horse, and I should like to put my views before you in this paper, at the same time apologising for any faults or discrepancies that may have crept in during its rather hurried composition.

I am sure that this subject has not received a fraction of the attention it deserves. The Clydesdale is a splendid breed of work horse and will be in demand as long as working horses are needed. He has all the qualities and capabilities of the horse required by farmer and contractor alike, in many counties of Britain and in other countries too.

The Clydesdale breed is an important one and therefore I must discuss with you the following points:—

(1) The fact that the modern Clydesdale is less sound than he used to be.

(2) The reason why this should be so.

(3) The methods by which we are to rectify this trouble.

To illustrate my first point let me say that many of my clients are becoming disappointed with their Clydesdales. Several have asked me if they have just been unlucky or if the horse really is less sound than his ancestors. Quite often I have heard experienced horse men express their concern and say that they will have to leave the Clydesdale breed, because, as likely as not, it will let them down. Now surely, to the previous generation, the idea that a Clydesdale would let you down would have been laughable—its very reputation was built on its usefulness and dependability. I cannot tell what the situation was like before my time, but I have often heard members of the last two generations of veterinary surgeons remarking on this increase of unsoundness during their lifetime.

My own experience is limited to the last 14 years. During that time I have been examining horses for insurance companies, stallions for the Ministry of Agriculture and Fisheries and all types of Clydesdales at the Carlisle Auction Mart. I have noticed that the percentage of unsound horses has gradually increased. Over the last five or six years there has been a sudden sharp rise until, now, I have to reject up to 75 per cent. of all the horses I examine. My two colleagues on the veterinary panel of the Carlisle Auction Mart are in agreement with me on this high incidence of unsoundness, and that its percentage is increasing. Now the abnormalities covered by the term "unsoundness" are not only small lesions, they are not all ones which require great skill to reveal; they are abnormalities which even the layman can see and I am sure that on many occasions the buyer and seller spot the trouble as quickly as I do. Strictly speaking, the term "unsoundness" covers any abnormality even though it is one which will resolve naturally in a short time, such as an abrasion to a knee or hock caused during transit. But since the central theme of this paper is the broad picture of the Clydesdale horse and its future, I will refer only to that group of conditions which come under the heading of osteo-arthritis.

Under this main heading of osteo-arthritis, I include stringhalt, shivering, roaring, grunting, sidebones, ringbone, bone spavin, splints, bog spavin and thoroughpin, as I am convinced that these are all local manifestations of the same generalised condition. Further, I think that most research workers are of the same opinion.

Many will say that in my list I am including conditions which, for lack of evidence, should not be put into this group. Certainly I agree that we have little proof, but yet I find it very difficult to believe that all these conditions are not interrelated, for it is a common experience that if one of these conditions can be found in a horse, then very probably, on closer examination, further ones will be revealed. It is uncommon to find one only of these conditions in an animal except perhaps in a young horse.

Most people working with horses will have seen, time and time again, a young horse showing slight evidence of the conditions mentioned above. Perhaps only one of these conditions will be evident. Yet as the two-year-old or whatever age it is grows up, that condition becomes more pronounced and other conditions are revealed, until by the time the horse is six years old it will be a regular collection of these local manifestations of the disease.

It is possible, of course, for the clinician to recognise the type of horse which is likely to develop into what is commonly termed a wrong one. Grouped together, these conditions and their occurrence form a definite clinical picture.

Because I believe that each of these conditions is a local manifestation of osteo-arthritis, I consider them all to be of importance and any horse showing one or several of them I describe as being unsound. Some may consider me to be too strict, but I think that because the percentage of unsound horses examined is now so high we tend to be more lenient than in the old days. Many conditions which were once definitely signs of unsoundness are now less rigidly interpreted. I think the reason is that we have unconsciously lowered our standard to the gradually worsening situation. For example, I feel that many veterinary surgeons on discovering a splint in an otherwise normal horse say to themselves that since it will never cause any trouble it is unnecessary to be pedantic, and they pass the horse as being sound.

I must stress the fact that my experience of horses is chiefly gained from the Clydesdale. And yet, is there any other breed which has quite so high a percentage of unsoundness? Perhaps some of our members will be able to enlighten me. I believe the Shetland pony is rarely unsound, the thoroughbred not commonly; the cross horses and those used for light town work—the vanners and hawkers' ponies—vary a great deal.

The aetiology of the disease is unknown. I think I am right in saying that the current view among the research workers in Britain and the U.S.A. is that the disease, by its nature, manifestations and pathology, bears a general resemblance to the picture given by some of the vitamin deficiencies.

I cannot judge the validity of that view with authority but at the same time I cannot understand certain aspects of the problem if a nutritional deficiency is the secret.

The staple food of horses has for long been oats, bran, hay and straw during a large part of the year. With this great lack of fresh food, possible vitamin deficiency at once springs to mind, although it can be shown that when the hay has been well saved its vitamin content is quite adequate to what is known of the needs of the horse.

According to Dr. Moon, in the 1943 edition of Professor Linton's book on Animal Nutrition, horses occasionally suffer from a vitamin A deficiency, but, so far as I am aware, there is no evidence to show that this is associated with osteo-arthritis. In fact, common observation of the husbandry of horses in this part of the country fails to give any support to this view. For the last ten years the farm horse has been kept in the stable for shorter periods than before. Many have been at grass all the year round. The hawker's pony, which is so often kept under bad conditions of husbandry and fed only on odd scraps of food of indifferent quality, old hay or poor quality oats, has a much lower incidence of unsoundness than the average Clydesdale. And yet, while the Clydesdale has been kept on a more favourable and natural diet the incidence of unsoundness has become greatly increased. I have not noticed either that horses at grass are more often sound than those kept in the stable.

It may be that nutrition plays a part in the development of these osteo-arthritic lesions, but I cannot see that it is either a predisposing or an exciting cause.

On the other hand, we have the general acknowledgment that the disease is inherited. The geneticist would postulate the existence of an active lethal gene in the genotype, whose action is gradually made manifest as the horse develops.

It is always difficult for the clinician to show others the results of his experience. For a long time I believed that the aetiology of unsoundness was nutritional, but, as my knowledge of the local horses increased, my views have changed.

Each year I have examined many stallions; I have known the mares they cover, and have seen their foals. As the foals have grown into yearlings, the yearlings to two-year-olds and so on, I have been able to recognise the existence of distinct strains of conformation and performance. It is common knowledge that the experienced eye can look at a foal and recognise certain qualities which are characteristic of a certain stallion or mare. Out of this I have obtained a fairly clear picture of the various strains of Clydesdales in Cumberland.

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The older veterinary surgeons who had so much more horse work than we do to-day all believed that the disease was inherited. My own experience is limited to 14 years, but I no longer have any doubt that they were perfectly correct. I have so often noticed that breeding was related to a particular unsoundness, that it is possible to tell in advance what faults to look for when examining a horse. I know one clear strain of horses with stringhalt, and two strains of those with bogged hocks. Not all members, of course, show this unsoundness, but I have found that many of the foals from these strains show their unsoundness sooner or later. As one would expect, a foal with a high percentage of this blood is more likely to be unsound than another. If a stallion from this strain is mated with a mare of the same breeding, the offspring are most likely to be unsound. In fact, the percentage of unsoundness in the offspring is commensurate with the proportion of this strain's blood.

Occasionally one meets with quite startling evidence; in one day I examined five rigs, all got by the same sire—that sort of observation is uncommon, of course. Most of these strains have been recognised only because, after having asked the almost routine question as to how this horse was bred, I began to notice how often breeding was related to particular unsoundness.

It is common knowledge that certain strains have individual characteristics. The experienced eye can look at a certain horse and knows that it belongs to a certain strain.

While examining horses I have become increasingly impressed by the high incidence of unsoundness in one particular type of Clydesdale. You will all recognise and be familiar with this type. He has a narrow thorax with flat ribs; his hocks are turned in and are close together, his thighs are long and his bones are fine and rounded. His legs carry a lot of fine hair and his feet are shallow. In Cumberland it is referred to as the Scotsman's Clydesdale, in contradistinction to the old-fashioned Cumberland type. One of my clients describes the former type very aptly—"when you look at him from the front, both his fore legs appear to come out of the same hole; when looked at from behind, his hocks are tied like a woman walking in an old-fashioned hobble skirt."

You may call this the fancy fashionable type of Clydesdale. Certainly nearly all the showyard Clydesdales of to-day conform to this type and the breeders are very proud of his appearance. They say he is the nicest and most magnificent of his breed to look at.

I was not surprised to hear that one of the biggest owners of commercial horses in the North of England has found that this type of horse is quite unsuited to holding back a heavy weight when going down a hill. Apparently his hocks come close together, his stifles and feet go out; he loses the grip of his hind feet on the roadway and he tends therefore to sit down in the shafts.

To most farmers, certainly to all contractors, a horse is kept for work. We all know that the horse has so much competition nowadays from tractors and other mechanical devices that for him to hold his own and retain the rightful place he must be dependable and able to do the job expected of him. If this is the type of horse which is going to be in demand, then surely all horses, whether in the showyard or sale ring, must be judged solely on their ability to fulfil these requirements, that is, upon their physique and conformation for work, and not on popular showyard characters to please the eye.

I will now turn to my third point, that is, the methods whereby we can attempt to rectify the trouble. To my mind the problem can be approached from three different angles. Firstly, we, in the veterinary profession, must decide exactly what is to constitute unsoundness and apply it to every horse. In so far as osteo-arthritis is concerned, we must be quite clear whether or not the conditions I mentioned previously are all manifestations of the same disease. And finally, once we have agreed, we must be quite ruthless in our examination on every occasion.

Secondly, I feel that the Ministry of Agriculture and Fisheries could assist us very greatly in its administration of a revised Horse Breeding Act. At the present time, the Act, in my opinion, has a number of grave faults which counteract any good results it was designed to produce. These are as follows:—

(*a*) An owner, at present, can object to the inspector in his district, and as a result he is in a position to obtain an inspector of his own choice.

(*b*) The abnormalities which constitute unsoundness as far as stallions are concerned, do not include splints, curb, bog spavin, thoroughpin and grunting, all of which, in my opinion, are evidence of generalised osteo-arthritis.

(*c*) An owner who is refused a licence for a certain stallion has the right to appeal against the decision, without the support of a veterinary surgeon's certificate.

(*d*) Rejected stallions can still stand at stud, so long as they do not travel.

To rectify these faults my suggestions for a Revised Horse Breeding Act are as follows:—

(*a*) The owner should have no power to object to an inspector appointed by the Ministry to carry out the initial examination. To avoid any ill feeling in this connection, practising veterinary surgeons should not be expected to examine stallions owned by their own clients.

(*b*) Unsoundness, as applied to stallions, should be no less severe than when applied to mares and geldings and should therefore include splints, curb, bog spavin, thoroughpin and grunting.

(*c*) Any appeal against an unfavourable decision must be supported by a veterinary surgeon's certificate and the resulting dispute settled by a referee appointed by the Ministry and acceptable to the owner. By this method the final verdict would be a majority one.

(*d*) All rejected stallions should be castrated forthwith.

Thirdly, there is the part which could be played by the Clydesdale Horse Society and horse breeders. This may be briefly outlined as follows:—

(*a*) The present state of affairs must be pointed out to the members of the Clydesdale Horse Society and breeders so that they may realise how far they have strayed from the ideal commercial horse, by their yearning for the present fashionable animal.

(*b*) The great increase in unsoundness which has occurred during the development of this animal must also be brought to their notice, so that they may assist us in eliminating it as quickly as possible.

(*c*) In addition to the results obtained by a revised Horsebreeding Act, the Clydesdale Horse Society could further assist by starting a new stud book and entering therein only animals sired by stallions licensed under the revised Act and out of mares which had passed an examination no less severe than that required from the stallions. This examination could be controlled by the Clydesdale Horse Society and carried out by an appointed panel of veterinary surgeons.

Non-Parasitic Pruritus in Dogs

DISCUSSION BY THE CENTRAL VETERINARY SOCIETY

(*Continued from page* 156)

General Discussion

Major H. Kirk: He had listened with great interest to the highly practical papers delivered by Miss Joshua and Miss Iszard and also to the more academic paper by Mr. Worden. He did think that a learned profession such as ours should attempt to apply appropriate names to these various skin diseases in dogs. As Miss Iszard had said, everything was called eczema—and as an eminent American veterinarian had written to him, as soon as a client was told that his dog had eczema, off he went to the chemist and asked for "something for eczema." Despite the fact that there were these various affections—the itchy skin, called pruritus, the several varieties of mange, and different forms of eczema—they hardly ever diagnosed what was wrong with the dog, with any pretensions to accuracy.

He thought the use of the term "pruritus" should be confined entirely to pure irritability of the skin from no ascertainable cause: it was a true sensitivity neurosis. He wanted particularly to stress the importance of making an accurate diagnosis of pruritus, and would give three instances to show its importance. All of these were believed to be pure pruritus. The first was the receipt of a letter from a veterinary surgeon in Yorkshire, saying that he had been unsuccessfully treating ten Yorkshire terriers at a private house, all of which had the most intense pruritus. He said he had prevailed upon the client to bring two of the worst to London to see if he (Major Kirk) could help him. In due course they arrived, and they simply rolled about the surgery floor on their backs: it was painful to see them. He took some scrapings from both dogs, but found nothing. Careful examination of the skin, however, revealed a tiny papule on one of the dogs and, under the microscope, there was the sarcopt. He gave the owner some sarcogen, which he took back to Yorkshire, subsequently having some more, and it cured the whole lot. There was a case where one might justifiably have said, "here is pruritus," when it was actually parasitic.

The second case was one in which the dog could not stop biting its feet. He told the owner to put the feet in hot water; that was of no avail, so he instructed him to stand the feet in a solution of alum—again without result. He then treated the dog for mange and the whole thing cleared up. In that case there were no lesions whatsoever. The third case was an eight weeks old peke, which the owner said was scratching the whole time. He (the speaker) went into the question of diet and received the information that the dog was given "everything except meat"—the one thing he would wish the owner to give the dog in such a case. A meat diet was prescribed, but a fortnight later the dog was still scratching. He then sent the owner sarcogen and the symptoms at once cleared up.

They must not run away with the idea that in cases in which they could not find the sarcopt they had not got mange. It had come out that most of Miss Iszard's cases were not pruritus at all: they were scabies.

On the question of fleas, a dog might be brought with an intolerable itch. Though one could find no flea, one could be certain it was there if excrement were found, and bathing such a dog effected a cure.

Miss Joshua had mentioned the question of allergy: as eczema was a non-parasitic disease in the dog (though in medical circles they regarded it as contagious) he was convinced that in many instances it was an allergic condition. Some dogs showed an allergy to certain proteins all their lives: that idiosyncrasy was common enough in human beings. One could test for it: there were elaborate sets of soluble proteins which could be utilised. Following upon the theory that allergic skin disturbances, as eczema, are due to release of histamine in the tissues, a fortnight ago he read in the *British Medical Journal* that Parke Davis had created something of a mild sensation in the medical world with their product "Lertigon" which neutralised the poisonous elements in these protein-provoked skin affections. Another method commonly used by medical men was auto-haemo-therapy, in which the blood was withdrawn into a syringe and immediately injected intramuscularly, and quite a number of case records he had read showed this method to be excellent in stopping pruritus. That was a thing that might readily be tried by a greater number in veterinary practice.

He felt that there should be more effort to make an accurate differential diagnosis in skin diseases in animals, so that when the veterinary surgeon saw the lesions he could say "this case complies with this—or that." It was most unfortunate to call everything eczema.

The PRESIDENT (Dr. Wooldridge): Many of these conditions would probably be found to have a biochemical basis, and it was only by getting down to the fundamental work that they would eventually get the clinical information they required. The allergic effects of the proteins were common teaching in the medical world, but there was little authentic evidence that allergy occurred in normal veterinary practice. What real evidence had Major Kirk for his statement that it was common?

Major KIRK: If only practitioners would go through with their diagnosis in pruritus of unknown origin, and where the sarcopt could be definitely ruled out, 99 per cent. of them would agree that allergy was a factor to be reckoned with in veterinary practice.

The PRESIDENT: He wanted to bring out what were the practical results Major Kirk had obtained on that question of allergy.

Regarding the dietary statements made by Major Kirk, Miss Joshua had emphasised that there was a common fat deficiency—due in reality to a lack of certain unsaturated fatty acids, which was quite distinct from protein deficiency or allergy.

Major KIRK, proceeding, expressed doubt as to the wisdom of Miss Iszard's suggestion that the affected area of skin should be covered with a water-saturated gauze dressing—surely it would dry and stick fast to the sore area and so increase the pain and irritation. An excellent method of removing such an adherent dressing was to drop hydrogen peroxide on it.

Mr. H. C. DRIVER: He was very glad that Miss Joshua raised the question of fat deficiency because, as they knew, in distemper the fat left the body, and dogs having a long bout of distemper were very deficient in fat and, he believed, in calcium. After recovery, their skins were dry and irritable, and in nine cases out of ten one could prove a deficiency of calcium by giving them calcium in the food, when the condition of the skin would improve: the best form of it was suet. Miss Joshua mentioned calcium lactate. For some years he had been under the impression that the great majority of calcium preparations were useless, but two or three were satisfactory and one of the very few was Parke Davis's di-calcium phosphate.

He was very surprised that no one had mentioned that very valuable treatment—it might be empirical—in pure pruritus, of the use of sodium luminal. By its use the nervous scratching would be stopped in many cases.

Professor G. H. WOOLDRIDGE: The discussion that day had been of particular interest to him: to him, at any rate, it was a noteworthy fact that every speaker thus far had been a student of his, and he was rather concerned about some of the conceptions they had since acquired, which differed materially from those he had taught them. (Laughter.) It seemed to him that there had been another mentor in the field and that confused the issue. He had never taught Miss Joshua, for example, that every case of skin disease in dogs should be considered as parasitic until the contrary was proved. One should be on the look out, however, and he agreed with Major Kirk that one must not assume that a parasite was not present because one could not find it. He must disagree with Mr. Driver on that issue because, since so many of the cases might be parasitic, differential diagnosis should be borne in mind.

Many of the speakers had treated the subject as though pruritus were a disease—an entity—and that, he thought, was wrong at the outset. Pruritus was only a symptom: to use the term as though it designated a disease was, if the truth were told, merely an admission to yourself that for the time you were unable to determine what was the cause of the irritation shown by the patient, or the nature of the condition you were being asked to diagnose and treat. His conception of pruritus was that it was a form of skin irritation in an animal, which might or might not be parasitic. He thought that there was a very wide range of conditions responsible for this symptom, and perhaps one of the most important and one of the most regularly occurring, was at the time when the coat was being changed. Both Miss Joshua and Miss Iszard emphasised that fact, and yet he found himself in some disagreement with Miss Joshua, when she was dealing with symptoms, on the frequency with which she observed an absence of the under-coat in cases of pruritus: he could not quite gather whether she meant new living under-coat or not. (Miss JOSHUA: "Complete absence of under-coat, and not the relative absence which you find in the normal coat change.") That had limited it to a particular type, where fat deficiency was supposed to be the cause, but in quite a large proportion of these cases one found that the condition was associated with a considerable amount of dead under-coat at the time of changing. That itself set up irritation: you would find evidence of that around the teeth and quite frequently in the dejecta. The obvious treatment was to pay the patient quite a lot of attention each day for several days, picking out the under-coat and getting the skin itself in a better physical condition.

He was quite satisfied that in two-thirds of the cases of pruritus in the region of the croup with which they met it would be found that the anal glands were involved and that after evacuation the reflex irritation disappeared, unless the dog had a physical injury superimposed by rubbing, etc., in which case there was likely to be local infection.

Another cause to which no reference had been made was a chemical dermatitis, arising often from the repeated application of dressings by an owner who had seen the animal scratching itself once or twice, possibly as the result of boredom. In those cases it had been found that soap and water, applied two or three days in succession and well rinsed out, would produce a cure without any further medication beyond perhaps a light dusting with talcum powder.

The absence of fat, he was sure, was responsible for many cases, and in these he had recommended cod-liver oil, to be given daily in small amounts.

With regard to allergy, while he had not participated in any experiments concerned with the diagnosis of the condition, he had always borne the possibility of it in mind, and had, indeed, frequently experimented on his own account in suspected cases. Where an individual owner had the welfare of the dog at heart, he got him to write down every ingredient it was known that the dog had taken on successive days. He was then asked to omit one of these ingredients for a period and, if no improvement resulted, to restore that article of diet and omit another. He had, however, never found any evidence of allergy except in the case of horseflesh and in one case milk. He was satisfied that in many other cases there was an avitaminosis. It was, however, very difficult to say which vitamin, *in absentia*, was responsible; he felt that not only was the vitamin B complex involved, but sometimes vitamin C, and that the introduction of greens into the diet would be helpful.

He recommended the use of the vitamin B complex in the form of brewers' yeast: in his opinion it was unnecessary to endeavour to pick out and apply, in treatment, an individual member of that complex. He had used "Murnil," but with no good effects; he agreed with calcium administration, either as calcium lactate or as calcium permanganate, as recommended by the late Sir Frederick Hobday. One other line of treatment he had found helpful, but which seemed to have been forgotten, was, he admitted, empirical—the intramuscular injection of collargol solution. The injection produced a slight lameness for a time—12 to 24 hours—and the pruritus disappeared, but only for a month or so, the patient returning for another injection as required. This treatment was certainly of value in some cases, but not in all, where there was persistent scratching with a complete absence of any other discoverable symptom or lesion.

Mr. T. L. WRIGHT: He had greatly enjoyed listening to the three chief speakers and the discussion which had followed. He would like the questions he wished to ask to be viewed as coming from one who, by force of circumstances, had been, as it were, pushed from a small practice amongst large animals to a large practice amongst small animals.

He agreed with Miss Joshua that the incidence of non-parasitic pruritus had been greater in recent years, but he was wondering if that was because he had seen more small animals recently, or because it was an actual fact. In any event, it had always seemed to him that non-parasitic pruritus was more in evidence in August and September.

Another thing Miss Joshua mentioned, and which also was a war-time condition to some extent, was the boredom of many animals which were left for a long time unattended, but he had noticed also that many animals were bored as it were for the opposite reason, namely, that they were over-petted.

He had always had a rough-and-ready method of diagnosis of the cause of scratching in dogs. It was his habit to ask, "does your dog stop in the middle of a meal, or at play, to scratch himself?" If it did, he looked for parasites; if the urge to scratch was not so great as to distract the dog's attention, then he was inclined to think it was non-parasitic.

He agreed that the loose use of the term "eczema" was undesirable, but an even greater measure of damage was done by the loose usage of the term "mange." He had seen a few cases in which dogs chewed the tail: almost literally they would chew it right off. The condition had nothing to do with impaction of the anal glands. Was it pruritus, from pain and irritation below the surface of the skin, or was it some form of mania?

The use of luminal had been mentioned by Mr. Driver. He had found in many cases of persistent scratching that small doses of potassium bromide and chloral hydrate would give them rest without narcotising them.

Professor Wooldridge had made reference to chemical irritation. In many cases there was a history of bathing with carbolic soap, and it was his belief that carbolic soap caused a lot of irritation of the skin. Give such a dog another bath, using ordinary plain yellow soap, and the scratching would cease.

No one had mentioned pigmentation of the skin. Many years ago he attended a number of wire-haired terriers which, at three years of age, started scratching incessantly and later on developed blackened areas of skin. In connection with melanosis, he would like to ask if it was the deposit of pigment that caused the irritation, or did the persistent irritation cause the deposition of pigment?

Dr. TOM HARE: Some of Miss Iszard's pruritus cases bore a close resemblance to the syndromes of the haemolytic streptococcus infection. He would suggest that if Miss Iszard had the opportunity of studying such cases in breeding kennels she might appreciate their contagiousness and their periodicity. The tendency of symptoms to recur at approximately six-monthly intervals was rather a striking phenomenon of the haemolytic streptococcus infection and in consequence we should be very cautious in applying the word "cured" to the effects of treatment of individual cases.

Also he would emphasise the necessity of noting down the detailed history of each individual case, from the time the dog came into the owner's hands to the time it was brought to the veterinary surgeon. By this means the veterinary surgeon would acquire a clearer conception of the pathogenesis of the haemolytic streptococcal infection. The primary site of infection was invariably the tonsils and from there the streptococcus might go to quite a number of sites *via* the blood stream or lymphatic spaces, such as the uterus and kidneys. The streptococcus produced a toxin which had destructive powers in the skin. In the acute exanthematous stage—which they rarely saw unless they were connected with breeding kennels—there was a scarletiniform rash, the peeling of which caused pruritus. The rash passed very quickly, within about 36 hours. That was followed by a papular-pustular eruption along the mid-line of the dorsum, which sometimes extended from the forehead to the tip of the tail. The eruption also might extend along the abdomen, the flanks and down the limbs, about the junction of the mucosa of the lips with the skin or on the feet, thus producing interdigital "cysts." The pruritus accompanying the eruption caused the dog to rub, scratch and gnaw, resulting in excoriations and secondary staphylococcal infection, which in turn resulted in the so-called "eczema," abscesses and septic cellulitis.

The structure of the skin which was particularly susceptible to injury by the haemolytic streptococcus toxin, was the pilo-sebaceous glands. When these glands were injured or destroyed the contained hairs became atrophic or died, thus resulting in alopecia. Incidentally the anal glands and cerumenous glands were modified sebaceous glands and were commonly injured by the toxin and thus became part of the clinical dermatitis syndrome of the haemolytic streptococcal infection.

The eruption, which he had been describing, usually originated as little vesicles, which ruptured and thus tended to become secondarily infected by staphylococcus, resulting in pustules. The pustules ruptured leaving scabs having a concentric structure rather like mother-of-pearl. In chronic stages, say of over a year or more, the affected skin areas became darkly pigmented and corrugated, as was well seen in the axillae. "Elephant skin" was an old term applied to such dark corrugated areas.

One was seeing a wide variety of lesions, all of which, if one had the opportunity of studying them sufficiently carefully, were seen to have a continuity with the original scarletiniform rash. They were derived from the action of the streptococcus toxin on the skin.

Mr. Worden's remarks raised the question of the nature of this toxin and how it injured the skin. He, Dr. Hare, was not impressed by the notion that vitamin deficiency was the primary cause of these forms of dermatitis under discussion. It seemed more probable that any demonstrable avitaminosis in dogs would be consequent upon infection, which in the case of the haemolytic streptococcus, detrimentally affected the patient's nutrition. He was not qualified to comment on the chemical structure and relationship of the streptococcal toxin and vitamins. He hoped Mr. Worden would extend his study to the streptococcal dermatitis of dogs and help to throw light on many of the difficulties which still beset us. He made no apology for limiting his remarks to the so-called *Beta haemolytic streptococcus* dermatitis, because it was so very prevalent and yet so imperfectly understood by a proportion of the profession. In conclusion he wished to thank the principal speakers for their contributions to a most interesting meeting.

Mr. J. W. H. HOLMES: They had had a number of papers in the past, before that Society and others, in connection with skin diseases in small animals, and on those occasions he had made a remark which he did not see any reason to retract that day, *i.e.*, that all skin diseases should be regarded as external in origin and possibly parasitic until the contrary was proved. One of the reasons for the high percentage to which Miss Joshua and Miss Iszard had drawn attention was that they had been chiefly in practice since the war started. Derris had been short, but had they been in practice during the years prior to the war, all scratching dogs would have received that treatment and, if so, he maintained that the 12 per cent. would have dropped to about 1 per cent.

Miss Joshua and Miss Iszard had made a very careful classification of the type of skin lesion that had been observed. They had then given the treatment they adopted, and one was struck very forcibly by the fact that some form of external medication was adopted in practically every case.

Looking through the list of cases given by Miss Joshua, they would see that, with the exception of a suggestion that vitamin B and fat-deficient diet came into it, most were attributable to external irritation. For example, we did not know the cause of seborrhoea, but we did know that the scratching of the dog in this affection was associated with the accumulation of secretion.

He did maintain that if derris had been available the numbers of cases would have gone down. In going through the therapeutic agents, if one compared to-day with a few years ago it was very noticeable that whereas at that time arsenic was the agent of choice, in the discussion to-day it had been barely mentioned. He quite agreed that arsenic should be put on the shelf in canine dermatology.

He was particularly interested in the pruritus associated with "heat" and pseudo-pregnancy, in the bitch. Miss Joshua had drawn attention to the fact that the lesions in these conditions were confined to the loins or the top of the back. He should like Mr. Worden, from his researches into the nature of the physiology of the condition, to try and give them some explanation for that. In regard to the irritation of the mammary gland region, he agreed that there did seem to be some relation with the physiological factor.

Regarding the question of chemical dermatitis, when he was at Camden Town the skin cases formed about 40% of the work. A large proportion of these dogs had been treated excessively and continuously with practically every known remedy, and they came up an absolute mass of scabs and sores, and with irritation. That was the most serious form of chemical pruritus. If one took that type of case and did nothing but bathing and talc, they recovered. Dogs which were kept in one place in the house sometimes passed urine on a rug very frequently, afterwards lying on it and thereby acquiring a skin irritation on the ventral aspect of the body; here again, provided the rug was removed, talc would do all that was necessary.

He had followed Dr. Hare's remarks on this and other occasions in connection with the *beta haemolytic streptococcus* and had tried to correlate it with his skin work, but he had not been able to convince himself—at any rate—of the importance of that particular organism. He agreed that the streptococcus was often found but frequently one was able to get a satisfactory answer to the question of causation without incriminating the much talked of *beta haemolytic streptococcus*.

Mr. G. A. TOMLIN thought it would be very helpful in the diagnosis of many cases if the true meaning of the word eczema were kept in mind: it meant "boiling over." Too many dogs were "powdered" far too often; he knew people who gave powders three times a day every day. As a result the bowel must be in a constant state of irritation, and the after-effects on the peripheral nerves promoted scratching.

Dogs received too much starch to-day; he recommended that instead of buying biscuits the owner should give the dog ordinary dry bread. In pruritus he had found sea bathing harmful.

Mr. J. K. BATEMAN: He was in rather a different professional stratum from most of them, but he could not help feeling that some of the speakers were guessing a bit. How did they come to the idea that that was a fat deficiency? At Northaw they insisted on depriving their dogs of all fat in their food; whether they should go to the rat, which might be fed on anything, he did not know; but the fact remained that they deprived greyhounds of all the fat they could, and yet there they did not suffer from skin trouble any more than other dogs. He should not like it to go out from that meeting that fat deficiency was a potent factor in pruritus. People like himself, who had to see the thing done, did know that if you gave a ration of meat of any sort to racing dogs which did not get exercise they would break out in the skin, through excess of protein. Major Kirk and Mr. Tomlin had said that there was too much starch in the food to-day, but they gave a lot of starch in the food of these greyhounds and, given exercise, the dogs did not suffer. It was possible to race a dog twice a week and never give it more than two ounces of meat a day: it would retain its body weight, remain in good condition and do the speed. For quite a period their dogs were raced twice a week on one-third of a tin of a certain food which contained very little meat, and they remained in perfectly good health.

With regard to chemical irritation, he had found, from people who had treated the dogs before he did, that sulphur was the most common cause of irritation of the dog's skin: anything more than 1 in 8 would cause it. He agreed with Mr. Wright, from what he remembered of practice, that carbolic soap was prone to produce skin irritation.

Mention had been made of the occurrence of pruritus of the mammary glands in bitches that were pregnant or pseudo-pregnant. Surely this was due to physiological changes taking place. Quite apart from the glands themselves, the teats were itchy, but this passed off when milk production commenced. The easiest way to achieve success in the treatment of pruritus was to apply sulphur in sperm oil, when available, in a dilution of 1 : 8.

Major R. F. WALL substantiated Mr. Bateman's remarks with regard to the feeding of greyhounds. Some people regarded the greyhound as an animal apart; however that might be, it had been asserted that a lot of starchy food was very bad for them. At the present time his greyhounds were getting ¾ lb. of starchy biscuit and 1½ lb. potatoes a day, and difficulty would be experienced in finding any dog with a trace of skin disease. That meant either that the greyhound was, in fact, an animal apart, or that starchy food had not the influence on the skin that was always ascribed to it. *Per contra*, he had met dogs which would break out after only one meal of meat.

He thought it was very important to differentiate skin diseases. If they called all cases either eczema or mange, the client would merely visit the chemist for an eczema or mange "cure."

It appeared to him that Dr. Hare was going in the right direction when he spoke of the streptococcus or staphylococcus, for he had often wondered if these skin diseases were not due to a toxin. When he met with such a case and could not find a parasite, the dog received a dose of either auto-vaccine or mixed vaccine, which gave satisfactory results. It evidently caused some change in the body tissues or fluids which was efficacious. Some of his most obstinate cases of pruritus had been dogs with no under-coat. In such he had prescribed antibacsyn, and within 24 hours the pruritus had ceased. He would like someone to explain that.

He had had many cases of dogs going mad with pruritus of the paws, especially in dogs from garages where paraffin oil had been spilled or where some acid had been dropped.

Finally, he would like to ask if some of the cases of pruritus seen in bitches could have any association with the unsexing process.

Mr. F. FRANCIS: He would like to refer to the point raised by Mr. Driver, that very little absorption took place when calcium was given by the mouth. That was the teaching, and he had hoped that Mr. Holmes would have made some remarks about it. Mr. Bateman had raised the question of animal fat. Professor Hobday always advocated the use of whale oil in skin dressings and Professor Wooldridge the use of horse fat.

There was one common factor in all these cases of non-parasitic pruritus, namely, dirt: the dogs were not bathed. That was against the teaching; Professor Wooldridge always used to say that a dog should be bathed at least once a month in winter and once a fortnight in summer.

The PRESIDENT (Dr. W. R. Wooldridge): He did not think it was generally sufficiently appreciated that the mechanisms of carbohydrate, protein and fat metabolism were not entirely distinct in the animal body. Foodstuffs normally used for one purpose might be utilised for another, in the absence of the more usual food supply. So that an animal, *e.g.*, a greyhound, might be trained in such a way that it might do without the amount of fat that would be required by a house dog which was not getting anything like the same amount of exercise.

The Replies

Mr. A. N. WORDEN: If Major Kirk could demonstrate specific skin-sensitisation in cases of "eczema" it might be possible to follow up the matter, but Pomeroy's findings must be remembered. It was difficult to account for Mr. Driver's results with calcium therapy, but if calcium deficiency were suspected then serum-calcium determinations should be made. Had Professor Wooldridge, during the course of his lengthy experience, noticed waves of incidence of "non-parasitic" dermatitis? [Professor WOOLDRIDGE: "Yes, there have been some years when parasitic dermatitis has been so common that I cannot imagine that it has been worse lately than it was then. Undoubtedly, however, it has come in waves, in the manner of true epidemics."] Had it been common during the war of 1914-18? [Professor WOOLDRIDGE: "No, I cannot recollect that it was common then."] In the absence of further evidence infection other than by arthropod parasites, with some degree of periodicity, could not be excluded. Harris and Innes in 1931 had shown that the normal young healthy dog was independent of a dietary source of ascorbic acid or vitamin C. There was evidence that in some domestic species which normally synthesised vitamin C, reproductive stress might lead to the need for an exogenous supply, but alleged cases of deficiency in dogs had so far been recorded on inadequate evidence. There might be individual susceptibility to yeast, but so far as its vitamin B content was concerned there was little fear of toxicity from normal dosage. The whole subject of vitamin B complex deficiency in dogs under practical conditions was largely one of clinical impression: biochemical data was scanty. He thanked Dr. Hare and Mr. Holmes for their remarks, but time did not permit an adequate discussion of the points they had raised. That skin lesions could arise from hormonal disturbance was well known in man. The condition to which Mr. Holmes had referred was only the analogue of "napkin erythema" in babies and "urine burn" in various domestic species: it could not be regarded as the cause of the majority of cases they were discussing.

He must agree with the remarks of Mr. Bateman and others regarding protein and carbohydrate: dogs could be reared quite satisfactorily on meat-free diets, while there was little evidence that a diet rich in carbohydrate was harmful, provided other dietary factors were present in adequate amounts and the calorie allowance was not excessive. The similarities between some of the cases discussed by Miss Joshua and Hansen's puppies were remarkable, but the effects of a fat-deficient diet should be studied with older dogs, while the serum lipids of the naturally occurring cases should be determined if facilities permitted. Toxic reactions due to the coupling of certain drugs or other introduced substances with the animal's own proteins, which then behaved as foreign proteins, were well known, and might be responsible for the cases mentioned by Professor Wooldridge.

Miss ISZARD: Major Kirk had raised the point about the weak procaine solution. She had suggested that it might be changed after a period of 26 hours: as a pad soaked in the 5 per cent. procaine solution became dry it should be taken off and replaced by another wet one.

It would appear from Dr. Hare's statement that the heading of her paper should have read "Streptococci and their toxins in action." She could not agree with him, because other explanations at least equally convincingly could be provided for all the cases quoted. For example, monthly periodicity: well, dogs shed their coats six-monthly. How did Dr. Hare account for the action of thyroid in the dog with alopecia? There were many things in his contribution to the discussion that one could not correlate at all.

She did think that, in a great number of instances, eczema was the result of irritation of the anal glands: she could get records of dozens of cases where evacuation of these glands had produced the desired result.

Nobody had explained the colour change of the hair: was she to take it that the melanotic skin was associated with the change in colour of the hair, or was it due to some other cause? It was a very difficult thing to explain to the owner. It was quite possible that the irritation always seen in dogs with a thick coat which had been stripped was due to changing the coat, and dogs that had been stripped many times frequently would develop a severe irritation and then eczematous patches. One did not find this particular type of scratching in short-haired dogs when they were changing their coat.

Regarding the matter of percentage incidence, mentioned by Mr. Wright, she could only speak of the war-time period, but during that time 12 per cent. of the patients at the clinic she attended had developed pruritus; moreover, it was a periodic rise: they would find this experience corroborated by all those who did clinic work. Now they used sarcogen, which was better even than derris for lice and fleas, but still the percentage remained up and could not be attributed entirely to lack of a suitable agent for removing parasites.

She agreed entirely with everyone who had spoken about carbolic soap; dogs bathed with it were often found a mass of irritation.

Referring again to the melanotic skin—whether the infected follicle was the result of irritation, or whether the irritation produced the infected follicle—she contended that this was but another form of the "chicken and egg" adage.

Miss J. O. JOSHUA: Major Kirk had asserted that many of the cases that had been recorded as non-parasitic were, in fact, sarcoptic mange, but Miss Iszard had just told them that sarcogen also dealt with lice and fleas quite adequately! He also raised the question of allergy. The only instance she knew which she thought to be an authentic case of allergy was in a certain family of chows: if raw meat was exhibited these dogs immediately developed acute suppurative eczema. The evidence, though mainly circumstantial, seemed fairly definite.

Many speakers had held that the diet of dogs affected with pruritus had been high in starch; she had found that many of these cases had been fed adequate protein.

As far as Mr. Driver's comments on calcium were concerned, she failed to understand why he had not had good results with calcium administered by the mouth, for she found that some cases responded well.

Regarding sedative treatment, one naturally tried sedatives in cases in which one considered the pruritus to be of nervous origin. She used brewers' yeast very largely, having a regular weekly supply: it must be used fresh, and the only bad result she had had was that occasionally a dog had severe diarrhoea.

She, too, disliked the term "pruritus," because it was a symptom. She had tried to imply that the scratching to remove coat was due to an effort to that end by the dog which should have been accomplished by adequate grooming, and was therefore a physiological cause of scratching.

Mr. Wright had suggested that non-parasitic cases did not commonly scratch, but in her experience they did as much as those which were parasitic in origin.

In reply to Mr. Holmes, she was sorry to have to disillusion him but she had been fortunate enough to have an adequate supply of derris, and in fact, still had some. Until quite recently she had used derris as a routine for all pruritus cases but her percentage of non-parasitic cases remained at 12! In many of the cases she used internal treatment only; external treatment was often in the nature of a placebo. She had failed completely with cod-liver oil. She had tried animal fats as a topical application, without much result.

The scratching of the pseudo-pregnant or pregnant bitch she regarded as physiological: it caused mechanical removal of the hair and ceased after the bitch had whelped. She was not a great believer in regular bathing for dogs as a routine, provided they received reasonable grooming.

Lowestoft Corporation reports that it is informed by the Ministry of Health that the Minister cannot at present make any statement in respect of the post-war slaughtering of animals policy, but it is anticipated the control exercised by the Minister of Food will not come to an end quickly after the cessation of hostilities. With regard to the planning aspect, the Minister suggests that the Council should communicate with the Ministry of Town and Country Planning thereon.

THE VETERINARY RECORD

April 14th, 1945

PRURITUS IN DOGS

THE well sustained and most informative discussion staged at the Central Veterinary Society, which we commend to the notice of our readers in this issue, ranged, rather surprisingly from first glance at the narrowness of the title, over a variety of topics which are not only of immediate practical interest to the veterinary surgeon but also touch upon an immense and complicated field of scientific research in which knowledge is now rapidly advancing. The veterinary profession has been made familiar within hardly more than a generation with the manner in which scientific investigation has opened up broad vistas emanating from proper elucidation of baffling and apparently discrete practical problems : we need only mention, for example, " milk fever," " abortion " and " sterility," and it may well turn out to be so with others such as " spavin," " ringbone," " roaring." It is certainly clear already that it is becoming so with " pruritus," for although those who planned the discussion endeavoured to limit its scope to the " non-parasitic " variety, speakers could not restrain themselves—as indeed very properly they could not—from mentioning the significance of parasites, whether gross, as in the case of flea infestation, minute as in the case of the scabies mites, or microscopic as in the case of the bacteria, in especial streptococci and staphylococci. To a great extent, as has long been suspected by practical observers, these parasites wreak their effects, it is now being proved, when certain defensive mechanisms in the animal are not functioning efficiently. Beyond that relation, several difficult topics which are being unravelled by different schools of investigators were touched upon : " allergy," " metabolism," " hormone control," " psychic influences," " heredity " and others, while in the realm of therapy the varieties of treatment which were claimed to be successful in the hands of different experienced practitioners at first sight presented so little in common that the wary listener would naturally be inclined to be suspicious of them were it not that they were advocated by careful workers. Furthermore, in the practice of dealing with sterility, for example, it will be recalled we have now a very fair understanding of how the body " orchestra " involved—rendered discordant, so to speak—strikes out in harmony a symphony when a single section only of it is prompted, by some means, to play up. After all, what, at first glance, could be more at variance than " udder inflation " and " calcium medication " to restore harmony in another familiar " discord " ?

These descriptive images, it must be stressed, are not drawn to encourage indiscriminate therapeutic exploration by the recklessly adventurous, but rather as an earnest of the heed that ought to be paid, especially by the scientist working within a restricted branch of research, to the individual field worker when he, or she, lays before his colleagues the outcome of a careful experience.

Before we enlarge upon our meaning further, by suggesting certain promising approaches from a survey of the literature rapidly growing around the subject, we would like to draw attention to the sound admonition given by a speaker in the discussion that " the term ' pruritus ' should be confined to pure irritability of the skin from no ascertainable cause ; it was a true sensitivity (sensory ?) neurosis." As a mere synonym for the word " itch," used in denoting a symptom observed in the well-known " itching diseases," its employment may be dismissed as redundant, or worse even than redundant if it should ever be uttered by a clinician to fob off a client with a mere high-sounding word. The same speaker in the discussion, and others, pointed out forcefully the illusions likely to arise in the mind of a client when sent away gratified that the bestowal of a name had given finitude to a morbid manifestation, when in truth the disturbed mechanisms involved and the origins of the disturbance to these mechanisms were potentially of great complexity and susceptible of restoration to normal functioning only after highly skilled analysis by the expert. For such reason, we would like to think, an important modern school of dermatologists, the Edinburgh school, has proposed that the term " eczema " should now be banished from their literature. " The term ' pruritus ',' " say the authors of a standard textbook* on dermatology, " should be reserved to denote a disease of the skin characterised by itching, burning or smarting sensations, primarily unaccompanied by lesional changes." As such, in human dermatology, it is usually, but not invariably, restricted to certain well-known conditions, namely, the generalised dermatitis commonly seen in old age and the localised dermatitis confined to the periphery of the large orifices, *pruritus ani* and *pruritus vulvae*. An immense amount of light has been thrown on the origin of these conditions within the last three or four years, and the careful records now available in the literature seem to prove beyond doubt that in both sexes a very large proportion of them arise from a disturbed androgen-oestrogen balance in the body and can be definitely cured by re-adjustment of this balance. Again, some of the cases not ascribable to a derangement of this balance have been shown to be caused by excessive stimulation of the sensory nerve endings with acetylcholine, and the mediation of histamine or histamine-like substances does not appear to be necessary.

Furthermore, what seems remarkable is that adjustment of hormone balance brings about the disappearance of lesions—acneiform lesions and pityriasis—which had been, as it now seems, definitively ascribed to staphylococcal or streptococcal infection, but in which the bacteria transpire to be probably mere opportunist invaders that had managed to gain a foothold in a functionally deranged epidermis.

Pruritus accompanying such systemic diseases as diabetes, jaundice and pernicious anaemia has long been known, and modern research tends to show more and more the close interdependence of one large body system and another. Thus in deranged liver metabolism, in which the most obvious outward manifestation is jaundice, several systems may be synchronously disturbed, with profound effects affecting co-ordination throughout the hormone mechanisms, autonomic nervous system, and cell metabolism. Not only therefore, as was well illustrated in his treatment of the subject by one of the openers, is the function of the liver in converting saturated fats into unsaturated fats for the use of the tissues generally upset, but it also fails to destroy excess oestrogens arising in the reproductive cycle and the concentration of bile salts accumulating in the epidermis alters surface tension, it has also been said, so as to cause an excess of lymph between the prickle cells and consequent intense itching.

Disturbances in the co-ordination of complex processes of this kind which give rise to the unpleasant sensation of

* " Diseases of the Skin," by O. S. Ormsby and H. Montgomery. 6th Edn. 1943. (London: Kimpton.)

a desire to scratch are indeed, on reflection, merely an intensification or exacerbation of the functioning of mechanisms present providentially in the skin for the general protection and well-being of the whole body and the species. It has long been said that the instinctive desire of animals for cleanliness arises from the " normal " functioning of these mechanisms. A sure and obvious sign of illness is when they are upset and the animal becomes so generally depressed that it comes to have a dirty staring coat. " Normally," again, the animal shows obvious fluctuations in the intensity of the working of the mechanism. These fluctuations are manifested during the life of the animal as it progresses from birth to sexual maturity and on cessation of the reproductive life. They may again be " normally " pronounced, especially in the female, during its sexual life, and the voluptuous sexual act and the intense changes occurring during broodiness in poultry are said to be merely natural increases in intensity for the perpetuation of the species. These manifestations are, of course, subject to psychic influences, and we need hardly express the commendation which the opening speaker in the discussion under notice deserves for bringing out the relevance of emotional strains in the probable causation of many forms of itching. Such studies are of immense interest to the veterinary therapist and to the comparative psychologist.

Much has been done in recent years to elucidate what has been called the physiology of itching : how, in effect, scratching seems to be the substitution of one (epicritic) pain, which is more bearable, travelling along the more lately developed fast-conducting sensory fibres, for another, the itching, which is much less bearable—a so-called protopathic pain, travelling along the slow-conducting (C) non-myelinated sensory fibres, and how the responses in these fibres may be " coupled " with those in the adjoining parasympathetic fibres of the autonomic network underlying the epidermis. Obviously, this mechanism only works so long as the scratching continues, and if it goes on long enough it will result progressively in trauma, " eczema " and " lichenification."

In the field of virology, irritation may arise as a consequence of disturbances of the peripheral nervous system : for example, the intense pruritus which is a cardinal feature of Aujeszky's disease is probably due to the direct action of the virus on the sensory nerves. The clinician recognises lesser degrees of skin sensitivity in other diseases caused by viruses.

Subjects such as these merit careful examination by veterinary scientists whose special employment gives them opportunity to grasp their significance to the practical veterinarian, and if we have any criticism at all to offer on the planning of an almost model discussion, such as that conducted at the " Central," it is that the organisers should always give ample time for preparation to the openers specially designated to digest the theoretical or academic side. In that way the immensely valuable contributions which careful clinical workers can make to the progress of knowledge by recounting their experiences stand better chance of careful correlation with scientific advances.

The Secretary of State for the Colonies has appointed Mr. C. F. Hickling, senior naturalist on the staff of the Ministry of Agriculture and Fisheries, to be his fisheries adviser, in succession to Dr. E. S. Russell. Mr. Hickling is the first full-time occupant of this post.

CLINICAL COMMUNICATIONS

De-horning Cattle*

N. F. POLLOCK, M.R.C.V.S.,
West Runton

I am seldom requested to dehorn cattle. When the demand arises it is generally to render a vicious animal less dangerous or remove badly ingrowing horns in individual cattle.

One evening a client enquired quite inconsequently if I would dehorn some cattle for him. I said " Yes—how many ? " " About forty ; I'll give you all the help you want." Knowing my client I consented, and said I would do half of them one day for a start.

I met him and four of his men at 10 o'clock on January 26th, 1943, having brought with me a Cox's mask, six squares of chaff-bag, three pints of chloroform, a 2 oz. measure, two human bone saws, and two long ropes. The cattle, Shorthorn heifers, 18 months to two years old, were in a large open straw yard wherein were firmly fixed two large, square feed bins with each of their four legs running up about a foot above the top of the bin proper. At one end of the yard was a smaller covered in portion.

Eighteen heifers were stowed up in the latter ; one was lassoed around the horns, quickly skull-dragged to one of the bins and tied close up to it. The canvas end of the mask was closed and into it was stuffed a square of sacking. Having sprinkled two ounces of chloroform into the latter, the mask was tucked over the heifer's mouth and nose and quickly buckled on as tightly as possible.

Within two minutes she went down and I sawed her horns off: the underneath one first so that blood was not sprayed into my face.

The mask was removed and I started on the next one, which had been caught and tied up meanwhile. As soon as she was done another beast was awaiting her turn. There was no delay in securing the animals for me: there was always one ready.

As the work progressed I altered my technique slightly—the dose was reduced to 1 oz. and the mask withdrawn as soon as the first horn was removed. The same sacking was used twice or thrice only and then hung out to dry in the sun. Each time a fresh piece was inserted I put on 1½ oz. of chloroform ; then 1 oz. with each of the next two beasts. Sometimes a heifer would hang back on the rope and remain propped up on all fours. A push or slight relaxation of the rope would send her down. I timed one beast at random ; she went down in just over a minute. Some took longer, perhaps up to two minutes. One to two minutes sufficed for removing the horns.

The heifers were in no hurry to rise after their operation, and soon the yard was littered with recumbent forms. This delayed us little as there were two hitching posts available besides the eight on the two bins, but from time to time we would halt our progress to roll some of them out of the way and urge them up.

No attempt was made to check bleeding, which was profuse, but always checked itself within about five minutes.

The 18 were done in 2¼ hours, which included time spent on lancing and draining a haematoma on one of the heifers.

On February 8th I returned and did the remaining 21 in just under the two hours.

The weather on each occasion was warm, dry and still, with bright sunshine.

Summary

Thirty-nine cattle were dehorned in a little over four hours, using a bone saw.

One to 1½ oz. chloroform proved sufficient average dose.

The dose was inserted before the mask was applied.

The cattle dropped in one to two minutes.

The stock were fasted overnight.

Five men caught and tied them.

Weather is a governing factor ; and warm, dry, windless conditions greatly facilitate quick vaporisation.

Adequate help and suitable premises are essential for doing the work expeditiously.

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* Presented at the Summer Meeting of the Eastern Counties Division, N.V.M.A., at Bury St. Edmunds, August 15th, 1944. Received for publication, February 12th, 1945.

Obstruction of the Oviduct in Poultry and Its Treatment

M. JUNGMAN, D.V.M.,
EDGWARE

Obstruction of the oviduct is a common ailment of laying hens and may be brought about in various ways. Common causes are: inflammation of the oviduct causing insufficient secretion of mucus, formation of abnormally large eggs, and exhaustion of the bird with atony and paralysis of the oviduct musculature. A contributing factor is weakened muscles due to disease or improper feeding.

Treatment.—Make sure that the bird is unable to lay the egg without help, and if this is so proceed as follows:—

Wash the hands well and clean the cloacal region with warm soapy water. Place the bird on its back on a table and have it held down by an assistant, who grasps the legs in the right hand and the head in the left. Insert the index finger of the right hand lubricated with vaseline, through the cloaca, and with the left hand massage the posterior part of the abdomen so as to empty the rectum and make room for the passage of the egg. Withdraw the finger, wash and lubricate again, and then insert it into the oviduct until the egg is reached. Massage the abdomen with the left hand for a minute or so: this usually causes peristaltic contractions to begin in the oviduct. When this occurs try to hold the egg between the left hand and the inserted finger of the right hand and attempt to propel it towards the cloaca until the sphincter of the oviduct comes into view. The sphincter should then be massaged with the fingers of the right hand as this usually causes it to relax and allows the egg to be expelled. Now raise the posterior part of the bird and inject with a syringe a little olive oil into the opening of the oviduct and the cloaca. The bird usually recovers rapidly. In the writer's experience it has only once been necessary to repeat the procedure for removal of the next egg, in this case four days later; eggs were subsequently laid unaided.

The writer does not agree with those who assert that the oviduct is so fragile that rupture is likely from the proper carrying out of this technique. If rupture does occur, it is fatal within a very short time. Another complication is prolapse of the oviduct, and this is more common in pullets than in older birds. Treatment consists in replacing the protruding mass and closing the cloaca with safety-pins.

CONTROL OF ANIMAL PERFORMANCES

At the recently held annual meeting of the Association of Circus Proprietors of Great Britain, the Secretary, in his report, said that the year 1944 had been one of considerable importance in the history of the Association and of the circus profession, by the launching of the scheme for the registration of all animal acts with the Association. This important step aimed at ensuring that all performing animals presented in circuses or on the stage were properly conducted. The scheme which came into operation on October 1st, 1944, had been well received by the profession as a whole. The Home Office and the London County Council had been acquainted with details of the scheme, and in a letter dated August 18th, 1944, the Clerk to the London County Council said, "I am to state that the Council is glad to note the steps which the Association itself proposes to take to control the owners of performing animals." The London County Council wished it to be understood that the scheme in no way took the place of the existing statutory provisions and that, in particular, the provisions of the Performing Animals (Regulation) Act, 1925, and of the Protection of Animals Act, 1911, would remain fully in force.

Warm appreciation was accorded to Capt. W. K. Townson, M.R.C.V.S., the Veterinary Inspecting Officer, for his services in visiting circuses up and down the country, reporting upon the condition and housing of the animals, and giving advice and help wherever it was needed.

* * * * *

WEEKLY WISDOM

Four Propositions in Medical Education

". . . in fact the 'great headmasters' were obsessional psychoneurotics or egocentric maniacs, useful in bad times as alternatives, but a succession of them would be intolerable. Great characters can flourish only when the general character level is poor, as now in the Overlong Parliament. Great deans should be strenuously opposed. . . ."—The Lancet. (A Running Commentary by Peripatetic Correspondents), 1944, September 9th, p. 356. Proposition No. 2.

ABSTRACTS

[Control of Diarrhoea of Newborn Dairy Calves by Serum and Sulphaguanidine. WISE, G. H., and ANDERSON, G. W. (1944.) *J. Dairy Sci.* **27**. 965.]

The authors are mainly concerned with chemotherapy, especially the use of sulphaguanidine, with which they have previously recorded good results. The effect of this drug was studied in an extensive outbreak in a single herd. Channel Island breeds were more susceptible to the disease complex than Holsteins, the typical case dying in 12 to 24 hours. Gastro-enteritis was always found on *post-mortem* examination. Prophylactic injections of cod-liver oil and/or a polyserum (Coli-Enteriditis-Pasteurella) were insufficient to prevent infection though they helped subsequent therapy. Sulphaguanidine in doses of approximately 2 grammes per hundredweight given four times during the first 48 hours was helpful as a prophylactic, the calf being allowed to suck before the first dose. The therapeutic dose of sulphaguanidine should be high (7 grammes per hundredweight for the first dose, followed by 5 grammes and then 4 grammes) and treatment must be commenced immediately any symptoms are seen.

Before this drug was used the mortality among the calves showing the disease was 74 per cent. With its use the mortality fell to 9 per cent. The authors advise dosing early and emphasise the necessity for varying the dosage according to the individual calf to avoid as far as possible the danger of toxic effects. They therefore urge its use as a prophylactic, rather than as a therapeutic agent, in herds where the disease is epidemic.

[This herd was a College herd under close control and these results would appear to need extensive field trial before the value of the drug in practice can be assessed, especially as it would appear that its therapeutic-toxic ratio is very close. Only 22 per cent. of the calves under risk showed scouring and no reference is made to seasonable distribution.]

P. S. W.

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[Report on a Type of Rhinitis in Swine. DOYLE, L. P., DONHAM, C. R., and HUTCHINGS, L. M. (1944.) *J. Amer. vet. med. Ass.* **105**. 132.]

A dystrophic rhinitis in swine herds is said to have affected areas in Indiana for the last 25 years. The condition distorts the snout of pigs by turning it up, to right or left, or else giving it a "pushed back" appearance. Hogs affected are suckers and weaners, but evidence of the disease is seen in sows and boars also. Affected animals are markedly stunted in growth. Apart from the deformity, symptoms consist of epistaxis, violent sneezing, rubbing snout against walls, and generally behaving as though trying to get rid of some nasal irritation.

Post-mortem lesions are those of a chronic inflammation of the nasal mucosa, with evidence of accumulation of bloody or purulent exudate in the nasal cavities, necrosis and distortion of the bones of the part, with abscesses and necrotic lesions in the lungs.

The authors distinguish between this condition and atrophic rhinitis, as well as "Bull nose" with its granulomatous swellings. The disease spreads to newly purchased pigs, and is on the increase in some areas.

D. J. A.

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[Progressive Ascending Paralysis in Dogs due to Deficiency of a Vitamin B Complex Factor Found in Yeast. SMITH, S. G. (1944.) *Science.* **100**. 389.]

Eleven out of twelve dogs on a synthetic diet with their vitamin B complex requirements met by thiamine hydrochloride, riboflavin, pyridoxine, nicotinic acid, pantothenic acid, para-aminobenzoic acid, inositol and choline became paralysed. There were often several attacks of transient paralysis with spontaneous recovery before the final progressive stage, which was fatal if untreated, was reached. This paralysis was prevented by feeding brewers' yeast, and cured by a water extract of yeast, or the subcutaneous injection of 100 gamma per kilo of synthetic biotin.

J. O. I. K.

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Erratum.—Dr. W. T. S. Thorp writes to point out that in the abstract (*Vet. Rec.* **56**. 492) of the publication by himself and co-authors on "Sulphasuxidine and Sulphathalidine for Infectious Calf Scours," the therapeutic dosages have been reversed. Quoting from the article: "sulphasuxidine should be given at the rate of 0·5 gram; sulphathalidine at 0·25 gram per kilogram of body weight."

Farm Livestock Emergency Service

A Short Account of its Formation and Activities

With the end of the war in sight and enemy air activity over this country diminishing, it has been decided to place the Farm Livestock Emergency Service on a "Stand by" basis, thus following the examples of the Home Guard and Civil Defence services. This does not mean that its activities will be brought to a close but simply that they are for the time being in abeyance, ready to function should any unforeseen contingency or emergency arise.

It may be appropriate now to give some account of the formation of the Service and the part it has played in the war economy of the nation.

Formation of the Service

It was in the spring of 1942, following representations made by the National Farmers' Union and by Dr. Wooldridge in his capacity as Director of the Veterinary Services of N.A.R.P.A.C., and President of the National Veterinary Medical Association, that the Minister of Agriculture and Fisheries, in conjunction with the Secretary of State for Scotland, decided that in order that farm animals injured in air raids, or through other war operations, may receive prompt treatment or be slaughtered without delay and salvaged for human food, a suitable scheme to be known as the Farm Livestock Emergency Service should be devised and administered by an Executive Committee. Previously N.A.R.P.A.C. had endeavoured to carry out this work under its Rural Areas Scheme. After consultation with the Minister of Food, the following Executive Committee was appointed, with an independent Chairman:—

Duke of Beaufort, Chairman.
Dr. W. R. Wooldridge, National Veterinary Medical Association.
Dr. Alex. Robertson, National Veterinary Medical Association.
Mr. G. Gibbard, National Farmers' Union.
Mr. W. Graham, National Farmers' Union and Chamber of Agriculture for Scotland.
Mr. R. H. Franklin, Ministry of Agriculture and Fisheries.
Mr. L. G. Davidson, Department of Agriculture for Scotland.
Mr. A. W. Anderson, Ministry of Food.

An annual grant from public funds was made to the Committee to meet the necessary expenses.

The first meeting of this Committee was held on June 24th, 1942, and at this and subsequent meetings the organisation began to take shape. Dr. W. R. Wooldridge was appointed Executive Officer for England and Wales, and Dr. Alex. Robertson Executive Officer for Scotland. Headquarters were opened at 29, Tavistock Square, London, W.C.1, with Major W. H. McGowan as Secretary, and a small staff.

Organisation

It was decided to follow the method adopted for Civil Defence, *viz.*, to recruit local voluntary workers from among farmers or other persons experienced in the handling of large animals as Parish Animal Stewards, and Veterinary Surgeons to deal with the technical aspects of the work. The whole Service was organised on a county basis, with the county organisation responsible directly to Headquarters in London.

The local organisation was linked with the Ministry of Food's slaughterhouse service in order to facilitate the efficient salvage for human food of animals injured or killed by enemy action.

County Veterinary Officers.—In each county a County Veterinary Officer was appointed who arranged with adjacent practitioners the areas for which they should be responsible, and also for mutual assistance to be given in case of need. The Local Veterinary Officer not only assisted to save productive animals but he was also able to advise upon the fitness of carcases for human consumption and thus enable them to be sent to a recognised slaughterhouse or to a knacker. Records of casualties among farm stock were made, giving details of treatment, slaughter and the extent of the salvage, and were forwarded to Headquarters. Veterinary Officers worked in close co-operation with their County Animal Steward, local Slaughterhouse Managers and the Police.

County Animal Stewards.—The National Farmers' Union was good enough to assist F.L.E.S. by allowing their County Branch Secretaries to act as County Animal Stewards in most counties, and to be responsible for the recruitment of additional Parish Animal Stewards in areas not at present covered. They collaborated with the County Veterinary Officers, the Police and the local A.R.P. authorities to ensure a satisfactory system of communication and effective co-operation. They also distributed iron rations of petrol coupons to Parish Animal Stewards, when applied for, for use in an emergency, and assisted them in other ways. The Service owes a great debt to these hard worked officials who found time to build up efficient organisations in spite of their many pre-occupations. The veterinary profession were thus relieved of an onerous duty which they had previously shouldered under the original N.A.R.P.A.C. Rural Areas Scheme, but which they could not continue to do in the face of greatly increased animal health work, although some of them continued to act as the County Animal Steward in addition to being County Veterinary Officer.

Animal Stewards.—One Animal Steward was appointed to a small area, usually a parish or group of parishes, and he arranged for local assistance to be available to animal owners. He recruited a a few helpers with experience in the handling of farm stock, and a local butcher if available, to form his parish squad. In the event of an air raid, the Parish Animal Steward proceeded to the site of the incident with his squad, where in cases of urgency they rendered any service deemed necessary to save the lives of animals, or salvage carcases.

At the time F.L.E.S. was formed there already existed a large body of Veterinary Surgeons and Animal Stewards throughout the country enrolled under the N.A.R.P.A.C. Rural Areas Scheme. In response to a letter from the Chairman some 900 Veterinary Surgeons and 6,000 Animal Stewards accepted appointment in the F.L.E.S.

The Service has, from its inception, worked in the closest co-operation with the slaughtering organisation of the Ministry of Food. There has been a mutual interchange of information between the two services and the closest liaison between their personnel and that of F.L.E.S. This has resulted in the filling in of a good many gaps in the arrangements for securing salvage of casualty carcases.

Propaganda

In the early days of air raids many cattle, sheep, pigs, horses and other animals were lost completely owing to the failure of the farmer to notify his casualties sufficiently early. Generally speaking, the efficiency of the Service depended upon the speed with which the affected farmer, or neighbouring farmers, acted. Accordingly F.L.E.S. propaganda was from the first directed towards informing farmers of the necessity of such quick action and how to take it.

At an early stage the Executive Committee issued a pamphlet entitled "Duties of Animal Stewards," which gave full instructions regarding building up a local organisation, the action to be taken on appointment, and also after an incident had occurred. Instructions regarding emergency slaughter were included, together with an extract from the Defence Regulations, paragraph 79B, which authorises Chiefs of Police to issue permits to slaughter to officers of an approved organisation, which the Service became for this purpose. This pamphlet proved of great value and large numbers of copies were furnished on request to Chief Constables of Police and A.R.P. Controllers throughout the country, thereby greatly assisting co-operation both before and after the occurrence of incidents.

A number of other pamphlets were subsequently issued, giving advice on such subjects as compensation for personnel injured on duty, how to deal with phosphorus and butterfly bombs, the vital importance of quick salvage, how the Service works, etc. An "Occasional Bulletin" was also issued to the personnel of the Service from time to time dealing with matters of general interest to the Service, and memoranda were sent out offering suggestions for improving it.

Eighty thousand copies of a striking poster, telling farmers in a few words exactly what they should do when casualties occurred among their livestock, were distributed throughout the country, and posted up in market places, Post Offices, etc. The poster proved most helpful and its value was shown by greatly increased salvage results, and a warm recognition of this fact from the Ministry of Food.

The Service in Action

During the period from the end of 1942 until the end of 1943 enemy activity over this country was of a sporadic nature and covered the whole country, but casualties were not numerous. From December, 1943, to March, 1944, the raids increased in number and were concentrated mainly on the Eastern, South-Eastern and Southern coastal areas; the casualty rate increased and active steps were at once taken to strengthen the Service in those areas. This policy of concentrating on the vulnerable areas yielded handsome results later on during the period of flying bomb activity. Incendiary bombs were much used during this period and many fell on farms and cattle sheds. As many of these had thatched roofs it was sometimes found impossible to extricate the animals in time to effect salvage. With these exceptions salvage was on a satisfactory scale considering the local circumstances and nearly all reports spoke of the local arrangements working satisfactorily.

Flying bomb activity commenced on June 15th, 1944, and with the advent of the rocket later on, still continues. Generally speaking the average number of animals involved in each incident was small. It is, therefore, very gratifying to record that of farm stock involved in these incidents 66 per cent. were salvaged, 20 per cent. were killed outright and 14 per cent. were satisfactorily treated by Veterinary Surgeons. Thus salvage efficiency had about doubled during the

life of F.L.E.S. Casualties among sheep and cattle were the most numerous, with comparatively few affected pigs and horses. In a report from a Ministry of Food official covering the flying bomb period, the following opinion was expressed:—

> "Generally speaking the salvage of meat from casualties during the past few months throughout Kent and Sussex has been very satisfactory."

Similar reports were received from other parts of the country.

It may be of interest to record that in the earlier raids by enemy aircraft livestock casualties were usually caused by H.E. blast, fragmentation bombs or machine gun fire. If the cattle were lying down they often escaped injury as the blast passed over them. With flying bombs there were a greater number of shattered carcases and more were killed by blast than by flying splinters. Usually only those in close proximity to the bomb burst were damaged. Quite a number of cattle died as the result of eating pieces of wire lying about after the explosion of V bombs.

The following examples of salvage effected, which have been taken from reports sent in, may be of interest:—

10,524 lb. of fresh meat were salvaged and only 18 lb. condemned when 16 steers were rescued from burning stalls after an incendiary raid and very promptly despatched to slaughterhouse through co-operation between farmer, haulage contractor and Animal Steward.

At another incident 15 steers were injured and as a result of prompt action on the part of all concerned 6,549 lb. of beef were salvaged and nothing condemned.

After an R.A.F. plane crashed in the Midlands the local Parish Animal Steward notified the Slaughterhouse through the N.F.S. of animal casualties. Quick survey showed only three carcases fit for salvage, the other five being too badly injured. This opinion was later confirmed by two Veterinary Surgeons. The three carcases fit for salvage were delivered at the Slaughterhouse within 1½ hours, the other five being sent to the Knacker.

When a flying bomb dropped among 31 pedigree Friesian heifers the Slaughterhouse Manager and Veterinary Surgeon attended the incident together. Highly satisfactory salvage of seven cattle resulted (1,748 lb. meat) and the nine cattle injured were all treated by the Veterinary Surgeon. Fifteen animals were unaffected.

A Parish Animal Steward was instrumental in salvaging nine out of eleven sheep injured at another incident, and arranging for the treatment of the remainder.

In another case the Slaughterhouse Manager reported that in his opinion salvaging arrangements worked well. Ten cattle were slaughtered on the farm and dressed at the Slaughterhouse and yielded 2,523 lb. of meat, only one carcase proving to be too badly damaged for any salvage to be attempted. A further 14 cattle were treated by the local Veterinary Surgeon.

One flock of sheep suffered heavy casualties when 12 sheep were killed outright and proved to be too badly damaged for salvage to be attempted, and a further 23 (17 sheep and six lambs) had to be slaughtered. 851 lb. of meat were salvaged. The Veterinary Surgeon attended the incident.

Notification was received at the Slaughterhouse, through the Police and A.R.P. Control Room, of an incident which involved 19 sheep. 965 lb. meat were salvaged and 342 lb. condemned due to blast which rendered it unfit for food.

A Parish Animal Steward attended an incident at a farm and himself slaughtered and dressed eleven sheep on the premises. The carcases were then sent to the Slaughterhouse where 361 lb. meat were salvaged and only 66 lb. condemned—this due to lacerations and bruises.

Yet another flock of sheep were involved when eight animals were too badly damaged for salvage and 36 taken to the Slaughterhouse, yielding 1,315 lb. meat, 324 lb. being condemned due to bad bruising.

Very prompt action at another incident prevented a single pound of meat being lost. Ten lambs were injured by enemy action and notified by 'phone to the Slaughterhouse at 8.30 a.m. and delivered at the Slaughterhouse at 8.40. The Manager's comment was: "Everything worked satisfactorily through being brought in at once." 242 lb. lamb were salvaged.

Twenty-two sheep were salvaged and eight condemned when another incident occurred and was attended by the Parish Animal Steward who assisted in the salvage of 791 lb. mutton.

These are only a few cases out of many which could be quoted. In considering these results it must be remembered that the Service was a purely voluntary one and tribute must be paid to the unselfish devotion with which Veterinary Officers and Animal Stewards carried out their duties, often whilst enemy raids were actually in progress and bombs were falling in the vicinity. Their promptness in action alleviated suffering amongst wounded animals and effected a great saving of meat for human consumption. Salvage work has been hampered at times in some regions by the lack of suitable transport for moving animals.

Conclusion

In looking back over the work of the past two and a half years, one of the most gratifying features has been the spirit of helpful co-operation exhibited by Veterinary Officers, their assistants, and by County and Parish Animal Stewards. All have worked together as one team, with harmony both at headquarters and throughout the Service, and though burdened by much extra war work individuals have turned out by day and by night to fulfil their obligations in this purely voluntary service in the most self sacrificing way. Willing co-operation was always maintained with the personnel of the Ministry of Food and with the A.R.P. staffs and Police.

In conclusion it is gratifying to know that although the Service comprised some 900 Veterinary Surgeons and about 6,000 Animal Stewards, the total cost to the nation for the two and a half years of its existence has been no more than £3,500. This compares favourably with some other organisations.

In the words of the Chairman, His Grace the Duke of Beaufort, there is no doubt that when victory is secured we shall be able to look back with satisfaction on the contribution to the war effort of the Farm Livestock Emergency Service.

29, Tavistock Square,
London, W.C.1.
March, 1945.

QUESTIONS IN PARLIAMENT

University Grants (Veterinary Colleges)

Mr. Rostron Duckworth asked the Chancellor of the Exchequer to what extent veterinary colleges will benefit by the increased university grants announced by him on February 13th.

Mr. Peake: The veterinary colleges are not, in general, parts of the universities and the benefit they may derive from the increased university grants is therefore generally speaking negligible. My hon. Friend will remember that the second report of the Committee on Veterinary Education in Great Britain reviews the whole question of the future of veterinary education in this country.

Service Doctors (Press Communications)

Sir R. Tasker asked the Minister of Health whether doctors employed in the Services are forbidden to communicate with medical journals unless approved by higher authority.

Mr. Willink: The medical staff employed by my Department are subject to the rule, applicable to civil servants generally, which requires the sanction of the Head of the Department to the publication of any book or work the subject matter of which is connected with their official duties. This does not preclude them from communication with medical journals on general professional matters and there is, for example, no obstacle to a medical officer of my Department making any communication to the medical Press on a technical subject which might be of interest or advantage to medical science. With regard to medical officers serving with the Armed Forces of the Crown, my hon. Friend should address his Question to the Minister concerned.

Livestock (Restrictions)

Major Keatinge asked the Minister of Food if, when an area is closed by foot-and-mouth disease restrictions, he will make adequate arrangements for the slaughter of marketable pigs and other livestock within that area, bearing in mind especially the shortage of feeding-stuffs.

Mr. Mabane: I can assure my hon. and gallant Friend that all reasonable steps are taken to minimise the inconvenience caused to farmers by restrictions on the movement of livestock imposed as a result of an outbreak of foot-and-mouth disease. Whenever practicable, special arrangements are made to accept marketable animals for slaughter without delay, but it is not possible to guarantee that the necessary labour and equipment will always be available within the infected area.

H.M. STATIONERY OFFICE PUBLICATIONS

The undermentioned have been published recently. Copies can be purchased through any bookseller, or directly from H.M. Stationery Office.

	Price net s. d.	*Post free* s. d.
Command Papers (Session 1944-45):		
(6611.) Veterinary Practice by Unregistered Persons, Committee on (Chairman: Lt.-Col. Sir John R. Chancellor, G.C.M.G., G.C.V.O., D.S.O.). Report. March 8th, 1945	0 3	0 4
Agriculture and Fisheries, Ministry of:		
Leaflet, Advisory, No. 319. Soil Sterilisation ...	0 1	0 2
doz.	0 9	0 11

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The Royal Agricultural College, Cirencester, reached its centenary last month. Professor R. Boutflour, who succeeded Professor Henley as Principal in 1931, will resume his duties when the College reopens next October.

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A suggestion by the Ministry of Agriculture that grants to heavy horse societies should be conditional on stallion fees being based on numbers of foals reared was strongly condemned by the Norfolk County Suffolk Stallion Society at a recent meeting, when it was decided to reply that the suggested scheme "was not only unworkable but would impair the progress made in the breeding of good and better horses."

NOTES AND NEWS

The Editor will be glad to receive items of professional interest for inclusion in these columns.

Diary of Events

April 18th.—Meeting of the Section of Comparative Medicine, Royal Society of Medicine, 1, Wimpole Street, W.1, 2 for 2.15 p.m.

April 20th.—Annual Meeting of the Mid-West Division, N.V.M.A., at Bristol (Royal Hotel), 2.30 p.m.

April 20th.—Meeting of the Sussex Division, N.V.M.A., at Brighton (Old Ship Hotel), 2.15 p.m. (Luncheon, 1 p.m.)

April 20th.—Meeting of the Midland Counties Division, N.V.M.A., at Birmingham (Grand Hotel), 2.30 p.m.

April 25th.—N.V.M.A. Sub-committee on First Aid Handbook, 36, Gordon Square, W.C.1, 2.30 p.m.

April 26th.—N.V.M.A. Committees at 36, Gordon Square, W.C.1: Loveday Report, 10 a.m.; Finance and General Purposes, 12 noon; Joint Veterinary Officers and Public Health and Parliamentary, 3 p.m.

April 27th.—N.V.M.A. Organising Committee, 36, Gordon Square, W.C.1, 10 a.m.; **Meeting of Council, N.V.M.A.**, at Friends' House, Euston Road, N.W.1, 11 a.m.

April 27th.—Meeting of the Yorkshire Division, N.V.M.A., at the University, Leeds, 3 p.m.

April 27th.—Meeting of the Royal Counties Division, N.V.M.A., at Reading (Caversham Bridge Hotel), 2.15 p.m.

April 28th.—Annual General Meeting of the Association of Veterinary Inspectors, Royal Hotel, Woburn Place (Russell Square), W.C.1, 2 p.m.

May 8th.—R.C.V.S. Council Elections—last day for nominations.

May 22nd.—R.C.V.S. Council Election—Voting Papers issued.

May 29th.—R.C.V.S. Council Election—Voting Papers to be returned.

June 5th.—R.C.V.S. Annual General Meeting.

June 6th.—R.C.V.S. Committee and Council Meetings.

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R.C.V.S. Council Election

The following additional nominations for election to the R.C.V.S. Council have been made:—

Hubert Gillmor, Ayr. Proposed by Professor J. W. Emslie and J. W. McIntosh.

D. S. Rabagliati, Edinburgh. Proposed by T. M. Mitchell and J. W. McIntosh.

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PERSONAL

Birth.—Warnock.—On March 31st, 1945, to Kitty (*née* Sheather), wife of J. Lyon Warnock, Esq., Monkton Court, Monkton Combe, Nr. Bath—a daughter.

Death.—Dolan.—On March 19th, 1945, John, aged 26, only son of Peter F. Dolan, M.R.C.V.S., D.V.S.M., and Mrs. Dolan, 10, St. Kevin's Park, Dartry, Dublin.

On behalf of our readers, we express deepest sympathy with Mr. P. F. Dolan, Chief Veterinary Officer of the Corporation of Dublin, and Mrs. Dolan, in their grievous loss.

Will.—Williams, Brigadier Augustus John, D.S.O., F.R.C.V.S., Director of Veterinary Services, India, 1928-32, late R.A.V.C., of Rhos-on-Sea. £21,627 (net personalty £21,535).

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R.C.V.S. OBITUARY

Gould, George Frederick, 32, Deep Lane, Basingstoke, Hants. Graduated London, July 16th, 1898. Died April 7th, 1945; aged 71 years.

Mr. G. F. Gould, whose death we record above with deep regret, leaves a widow and a family of six brothers and three sisters, amongst the former being Mr. G. N. Gould, M.R.C.V.S., of Southampton, the President-Elect of the N.V.M.A. To all thus bereaved much sympathy will be extended by our readers.

Magee, Louis M., of Dunboyne, Co. Meath. Graduated London, July 17th, 1902. Died April 4th, 1945.

Mr. Louis M. Magee, M.R.C.V.S.

A Great Irish Rugby International

Mr. Louis M. Magee, M.R.C.V.S., whose death we deeply regret to record, was not only a most capable veterinary surgeon—he was an outstandingly good operator—but an exponent of the art of Rugby half-back play whose achievements were a source of pride to a profession which, in relation to its limited resources, has produced a remarkable number of first-class players. Capped 27 times for his country, he consistently represented Ireland from 1895 to 1904 against England, Scotland and Wales, and in 1899 he captained the team which won the "triple crown." He visited South Africa with the British team, in 1896, which won 19 games, lost one, and drew one. Louis Magee was a constant spectator at the time-honoured fixture "Dublin Veterinary College *versus* London Veterinary College," at whichever venue it was played, but his interest in the younger members of the profession extended beyond the football field, for he was ever ready to give them the benefit of his wide experience in practice.

Prendergast, William Benedict, Deputy Chief Veterinary Officer, Dept. of Agriculture, Eire. Graduated Dublin, December 13th, 1906. Died February 19th, 1945.

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DEATH OF Dr. OSCAR V. BRUMLEY

Recording the death, in January, of Dr. Oscar V. Brumley, Dean of the College of Veterinary Medicine, the Ohio State University, the *Journal of the American Veterinary Medical Association*, in its February issue, comments that "his fearless direction of the Association, first as President, and later as head of the Executive Board for a term of historic years, must for ever stand out as the beginning of the current era in which organised veterinary medicine was brought to a new high mark on the scale of public esteem." Dr. Brumley was outstanding in the task of integrating the A.V.M.A. and State associations into a solid and workable unit, in the reorganisation of the central office and in enlarging the scope of its publications. Dr. Brumley was the author of "Diseases of the Small Domestic Animals," the third edition of which was published recently.

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LEGAL NOTES

Neglected Spaniels.—In a recent case at Dore (Hereford) Frances M. Iliffe-Smith, of Leadon Court, near Ledbury, was summoned for causing unnecessary suffering to 17 dogs at Marlas Cottage, Kilpeck, where she formerly lived.

An R.S.P.C.A. inspector said he found 13 spaniels in one downstairs room and four upstairs. They were nothing but skeletons covered by skin; there was no hair on the majority and they were all ravenously hungry. The dogs were covered with mange, and on the instructions of a veterinary surgeon he destroyed them.

Mr. J. F. Ryan, M.R.C.V.S., of Hereford, said that several of the dogs had infection of the eyes causing partial blindness, and others were lame through ingrowing toe nails. Their condition was much too far advanced to be cured.

Defendant was fined £15 and ordered to pay £2 13s. 6d. costs; she was also fined £5 for keeping 13 of the dogs without licences, and was disqualified for 12 months from keeping dogs.

The Deputy Chief Constable said the defendant was fined at Dudley last year on six counts for keeping dogs without licences.

As the result of a check-up following the recent outbreak of foot-and-mouth disease in Llanfaes, Brecon, a number of pig-keepers have been summoned for failing to keep a record of the movement of stock.

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INDEX VETERINARIUS

In a recent article [(1944.) *Bull. med. Libr. Ass.* **32**. 230] statements appeared which may mislead readers concerning the publication of *Index Veterinarius*.

It would be inferred from this article that the issue of *Index Veterinarius* is *often* delayed by at least six months, and that publication ceased at the end of 1942.

The author may not have understood the announcement on the front cover of *Index Veterinarius* concerning the dates of issue. This announcement shows the indexing period as January to June or July to December, according to the half year covered, and in each case shows the date of issue as the December or June following the close of the indexing period—an interval of six months in each case. This interval is the time taken to prepare the manuscript for the press and for the printing.

Publication has been continuous since 1933 and still continues.

RATIONS FOR HORSES

Rationed feeding-stuffs for horses will this summer be allowed only for animals engaged on work of national importance, states a Ministry of Food announcement. Horses kept for riding or driving, except those used by doctors or veterinary surgeons for professional purposes, or those providing an essential means of transport, will not be allowed rationed fodder. Hay and straw, however, are not rationed.

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ANTHRAX CONTROL IN CEYLON

The Colonial Office news service announces that the Director of Veterinary Services, Kenya, Mr. R. Daubney, C.M.G., O.B.E., has been in Ceylon to assist the veterinary authorities in an investigation into problems of anthrax. Mr. Daubney is Director of the Central Veterinary Research Laboratories, Kabete, Kenya. He has visited Government cattle farms and dairies in Ceylon and conferred with the authorities on the control of outbreaks of the disease that have occurred in certain parts of the island.

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SCHEME FOR THE CONTROL OF DISEASES OF DAIRY CATTLE

STATEMENT SHOWING THE NUMBER OF UNDERTAKINGS NOTIFIED TO THE MINISTRY OF AGRICULTURE DURING THE MONTH ENDED MARCH, 31st, 1945

County	Undertakings Notified		Ttotal Undertakings		
	During Month	Previously	Number	Number of Cattle	
				Cows	Heifers
ENGLAND					
Bedford	—	39	39	939	528
Berks	—	103	103	3,483	2,206
Bucks	1	99	100	3,274	1,872
Cambridge	—	13	13	33'	203
Chester	1	390	391	12,853	4,435
Cornwall	—	4	4	72	75
Cumberland	—	63	63	1,588	1,355
Derby	2	334	336	9,551	5,379
Devon	3	292	295	4,369	2,611
Dorset	—	69	69	2,137	1,129
Durham	1	285	286	6,193	2,136
Essex	1	247	248	8,886	5,299
Gloucester	3	98	101	2,929	1,699
Hampshire	1	401	402	11,159	7,391
Hereford	—	21	21	272	210
Hertford	2	77	79	2,366	1,444
Hunts	—	13	13	475	302
Isle of Ely	—	2	2	58	29
Isle of Wight	—	14	14	252	127
Kent	4	165	169	4,320	2,485
Lancs	—	199	199	5,712	1,812
Leics	1	103	104	2,636	1,834
Lincs (Holland)	—	3	3	25	11
Lincs (Kesteven)	2	21	23	329	168
Lincs (Lindsey)	—	108	108	2,055	1,165
Middlesex	—	15	15	611	291
Norfolk	—	194	194	5,804	3,977
Northants	3	83	86	2,405	1,875
Northumberland	—	67	67	2,221	1,144
Notts	6	168	174	3,832	2,329
Oxford	—	46	46	1,287	1,144
Rutland	—	9	9	172	124
Salop	—	263	263	8,027	3,819
Soke of Peterborough	—	1	1	37	31
Somerset	4	248	252	6,608	3,091
Staffs	—	207	207	6,047	3,253
Suffolk, E.	—	89	89	2,127	1,555
Suffolk, W.	—	51	51	1,054	637
Surrey	—	110	110	3,226	1,455
Sussex, E.	—	179	179	4,628	2,631
Sussex, W.	—	117	117	3,363	1,832
Warwick	1	139	140	3,366	2,135
Westmorland	—	13	13	354	444
Wilts	2	94	96	3,023	1,844
Worcester	1	157	158	3,254	1,524
Yorks, E.R.	—	109	109	1,685	979
Yorks, N.R.	3	116	119	2,428	1,543
Yorks, W.R.	3	263	266	6,511	2,516
WALES					
Anglesey	1	48	49	868	623
Brecon	—	9	9	199	108
Caernarvon	—	111	111	1,724	957
Cardigan	—	33	33	619	444
Carmarthen	2	240	242	4,327	2,267
Denbigh	—	50	50	974	511
Flint	—	115	115	2,574	1,146
Glamorgan	—	106	106	1,769	701
Merioneth	—	9	9	117	55
Monmouth	—	54	54	1,272	713
Montgomery	—	15	15	296	222
Pembroke	—	79	79	1,559	1,112
Radnor	—	—	—	—	—
TOTALS	48	6,770	6,818	175,424	95,028

Notes.—(1) Operative periods of undertakings: 1 year, 1,171; 2 years, 550; 3 years, 5,088. (2) Undertakings renewed for a further period: 1 year, 902; 2 years, 107; 3 years, 160. (3) Undertakings not renewed at end of operative period, 699. (4) The figures showing the number of undertakings notified during the month relate to entirely fresh undertakings and do not include undertakings renewed for a further period. Undertakings which have been cancelled or not renewed are not included in the figures for previous notifications.

County	Undertakings Notified		Total Undertakings		
	During Month	Previously	Number	Number of Cattle	
				Cows	Heifers
SCOTLAND					
Aberdeen	—	18	18	752	219
Angus	—	21	21	838	395
Argyll	—	6	6	113	115
Ayr	—	34	34	1,088	841
Banff	—	3	3	93	42
Berwick	—	2	2	53	22
Bute	—	—	—	—	—
Caithness	—	—	—	—	—
Clackmannan	—	7	7	282	257
Dumfries	—	13	13	707	610
Dumbarton	—	3	3	105	86
East Lothian	—	3	3	145	88
Fife	—	37	37	1,370	703
Inverness	—	8	8	324	191
Kincardine	—	3	3	127	83
Kinross	—	3	3	56	40
Kirkcudbright	—	15	15	924	692
Lanark	—	20	20	738	564
Midlothian	—	1	1	44	69
Moray	—	—	—	—	—
Nairn	—	1	1	14	—
Orkney	—	—	—	—	—
Peebles	—	2	2	28	16
Perth	—	31	31	709	425
Renfrew	—	7	7	277	201
Ross-shire	—	2	2	58	52
Roxburgh	—	—	—	—	—
Selkirk	—	—	—	—	—
Stirling	—	29	29	931	780
Sutherland	—	5	5	105	72
West Lothian	—	1	1	23	18
Wigtown	—	28	28	1,868	1,064
Zetland	—	—	—	—	—
TOTALS	—	303	303	11,772	7,645

Notes.—(1) Duration of undertakings: 1 year, 42; 2 years, 15; 3 years, 246. (2) Undertakings renewed for a further period (included in column 2 of statement) 1 year, 36; 2 years, 6; 3 years, 7. (3) Undertakings expired and not renewed (not included in column 2 of statement): 86. (4) The figures showing the number of undertakings notified during the month relate to entirely fresh undertakings.

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ADDRESSES OF DISEASE-INFECTED PREMISES

FOOT-AND-MOUTH DISEASE:

Lancashire.—Cross Farm, Hadfield, Manchester (Apr. 3rd).

West Suffolk.—Maltings Farm, Thelnetham (Apr. 4th).

SWINE FEVER:

Aberdeenshire.—Shielhill Farm, Bridge of Don, Aberdeen (Apr. 4th); Nae Cairn, Balmedie (Apr. 5th); The Heath, Parkhill, Dyce (Apr. 6th); Milton of Murtle, Peterculter (Apr. 6th).

Bucks.—Acacia Bungalow, Thorney Mill Lane, Iver (Apr. 5th).

Essex.—Glebe Farm, Tendring, Clacton-on-Sea (Apr. 7th); Black Boy Public House, Weeley, Clacton-on-Sea (Apr. 9th).

Glam.—32, Llantwit Road, Neath (Apr. 6th).

Herts.—Grange Farm, Croft Lane, Norton, Letchworth (Apr. 6th).

Lanarks.—Hartwood Home Farm, Shotts (Apr. 2nd); Carnwath Mill, Carnwath (Apr. 5th); No. 10 Holding, 130, Garthamlock Road, Shettleston, Glasgow (Apr. 9th); No. 2 Holding, Claddens, Lenzie, Glasgow (Apr. 9th).

Lincs.—Shaw's Yard, Upgate, Louth (Apr. 5th).

Norfolk.—Park Farm, Trunch, Norwich (Apr. 3rd); Unicorn Public House Yard, Hungate Street, Aylsham, Norwich (Apr. 3rd); White Hart Street, East Harling, Norwich (Apr. 7th).

Pembrokeshire.—Glenover Farm, Haverfordwest (Apr. 9th).

Somersetshire.—73, Station Road, Taunton (Apr. 7th); Halfway Cottages, Huntworth, N. Petherton, Bridgwater (Apr. 9th).

Suffolk.—The Shop, Cretingham, Woodbridge (Apr. 3rd); Stud Farm, Burrough Green, Newmarket (Apr. 5th); Chalk Hill Farm, Barton Mills, Bury St. Edmunds (Apr. 7th).

West Lothian.—Loaninghill Piggery, Uphall, Broxburn (Apr. 4th).

Worcestershire.—Wilden Works, Wilden, Stourport-on-Severn (Apr. 9th).

Yorks.—Blacksmith Farm, Hackforth, Bedale (Apr. 3rd); Amberley Road Allotments, Armley, Leeds (Apr. 3rd); Calverley Lane, Bramley, Leeds (Apr. 3rd); Poplar House, Endyke Lane, Cottingham (Apr. 4th); Trout Inn, Wansford, Driffield (Apr. 4th); Egypt Farm, Cliffe Lane, Gomersal, Leeds (Apr. 5th); Hall Farm, Upper Helmsley, Gate Helmsley, York (Apr. 9th).

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PHARMACISTS AND THE CHANCELLOR REPORT

"Pharmacists will view with sympathy the efforts now being made to curtail the practice of veterinary medicine by unregistered persons," observes the *Pharmaceutical Journal* in its issue of March 31st, and continues: "Control of veterinary medicine in Britain has

existed for a much shorter time than has the control of pharmacy, and especially is this the case with the restriction on the use of titles. Whereas the term 'pharmaceutical chemist' was restricted by the Pharmacy Act of 1852, it was not until 1881 that the use of the title 'veterinary surgeon' was confined by law to persons whose names were on the statutory register. Although the description of individuals is thus protected, no curb on place names such as 'veterinary surgery' or 'animal dispensary' has been brought about, a situation comparable with that of the word 'pharmacy' until it was rectified by the 1933 Act. With a growing understanding by the Government of the economic importance of our flocks and herds it is not surprising that this question of proper protection for the qualified and registered veterinarian should have been investigated by a committee set up by the Ministry of Agriculture, and it will be seen that decisive and far-reaching measures are recommended. Nothing is said in the report about the supply of animal medicines by pharmacists, nor upon the advice which members of the Society, in the ordinary course of the practice of their profession, are called upon to give on the use of remedial drugs. Nor does any comment appear on the restrictions recently imposed by certain firms on the supply of veterinary medicines through pharmaceutical channels. But these are matters which it would be as well to clarify and it is hoped that an opportunity for doing so will occur before any legislative action is taken on the proposals contained in the Committee's report."

CORRESPONDENCE

The views expressed in letters addressed to the Editor represent the personal views of the writer only and must not be taken as expressing the opinion or having received the approval of the N.V.M.A.

Letters to the Editor should reach the Office not later than by the first post on Monday morning for insertion in following Saturday's issue.

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THE COMPOSITION OF COUNCIL, N.V.M.A.

Sir,—To judge from the lack of comment on a recent letter from Mr. Anderson on the constitution of Council, N.V.M.A., the matter does not seem to arouse in the profession the interest which perhaps it deserves. While agreeing with Mr. Anderson as to the desirability of preserving a rather large Council, it seems to me that to abolish the geographical and divisional basis on which it is elected would risk depriving it of much of its virility. At the same time there is now a very real risk that sectional interests may become overweighted. I suggest, therefore, that this danger might be eliminated, and at the same time most or all the present admirable characteristics of the Council be preserved, by the adoption of a "sliding scale" of representation according to the numerical size of the Division—*e.g.*, a Division of up to 100 members might have one representative per 25 members (in addition to President and Secretary); one of up to 150 members, one representative per 40 members; one of up to 200 members, one representative per 50 members; one of up to 500 members, one per 100, and so on. I hope these rough examples may explain the principle I have in mind.

Yours faithfully,

Chipping Norton, Oxon. PAUL CROSFIELD.

April 1st, 1945.

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VETERINARY EDUCATION

Sir,—The report of a meeting of the Student Body of the Royal Veterinary College (London) published in *The Veterinary Record* of March 24th is important. The decisions reached represent the views of those who not only in the natural course of events will have to carry on and guide our profession, when those of us of the older generation have gone the way of all flesh, but who will be most directly concerned on the issue of the present controversy. If their views are accepted by our negotiating bodies and the universities, then there should be no difficulty in retaining the best of what we already have, plus those envisaged in the Second Report of the Loveday Committee.

Nothing has shaken my faith in the one-portal system of entry: the findings of the Goodenough Committee on Medical Education, where a multi-portal system prevails, strengthen it. Motion 5, passed by this Students' Body, in my opinion safeguards it.

Those conversant with our past history and the circumstances which arose and nullified the foundation laid by Vial de St. Bel must agree with the necessity and soundness of Motion 3 (B).

Yours faithfully,

"Rothiemurchus," J. F. D. TUTT.

St. Cross, Winchester.

March 31st, 1945.

"EMINENT CLINICIANS OF THE PAST": A CORRECTION

Sir,—I am most grateful to Mr. Tutt for pointing out the discrepancy mentioned in his letter published in your last issue. Through a slip on my part in transcribing from the most recent authority on the particular subject consulted [Leclainche, E. (1936.) *Histoire de la Médecine Vétérinaire*, p. 126] "*seventh* century A.D." was printed inadvertently in my address instead of, as it ought to be, "*ninth* century A.D."

The discrepancy pointed out by Mr. Tutt, however, stands in need of being reconciled still further than that. Other historians, I find, have also deduced that nailed-on iron horse shoes could not have come into general use in Western Europe before the end of the ninth century and that the practice was probably borrowed from the East. (A good summary is given in Dollar and Wheatley's *Horse Shoeing and the Horse's Foot*, 1898). Among the Goths and other northern European tribes, it has been found from archaeological research, iron shoes with nail holes had, however, been made much earlier, though among the Romans and after them probably in the territories occupied by them, iron sandals, and not nailed-on shoes, were in common use.

Even if we accept the view that the art of shoeing with nailed-on shoes was introduced from the East after the First Crusade, which ended in 1099, it is a little difficult to reconcile this view with Leclainche's statement:—

> *"Vers la fin du neuvième siècle, un événement se produit qui va transformer la vie des nations: la ferrure à clous est importée d'Orient. On est au temps des croisades et des longues chevauchées; la ferrure est erigée en un art noble que le baron ne dédaigne pas d'apprendre, et le fer à cheval figurera souvent dans son blason."*

That version would imply that the general adoption of the practice of using nailed-on shoes in the West did not take place until the end of the *eleventh*, and not the *ninth*, century as he states. Indeed, it was not until the Second Crusade, which began in 1191, that the British on their part came into intimate contact with the Saracens and borrowed afterwards, it is well known, many of their arts; the First Crusade had been manned almost entirely by the French. That sequence might well postpone the date of the event in question till the end of the twelfth century, were it not that there is a good deal of other testimony to suggest strongly that it occurred earlier.

The matter is of real importance in tracing the rise of the Farriers and the decline and eventual eclipse of the Marshals. The evidence on this subject, which is rather ample, deserves separate treatment, and I have again to thank Mr. Tutt for reawakening my interest in it. In the meantime, the broad theme as delineated in my address and based as concerns the point in question mainly on the authority of Leclainche may be accepted, with the correction now made, as substantially true.

Yours faithfully,

Pirbright. J. T. EDWARDS.

April 7th, 1945.

DISEASES OF ANIMALS ACTS, 1894 TO 1937, AND AGRICULTURE ACT, 1937 (PART IV).

Summary of Returns of Confirmed Outbreaks of Scheduled (Notifiable) Diseases

Period	Anthrax	Foot-and-mouth	Parasitic Mange*	Sheep Scab	Swine Fever
Mar. 1st to 15th, 1945...	5	14	1	13	56
Corresponding period in—					
1944 ...	8	10	1	4	25
1943 ...	18	1	1	10	17
1942 ...	11	1	4	7	14
Total Jan. 1st to Mar. 15, 1945	27	51	3	29	229
Corresponding period in—					
1944 ...	54	13	4	50	122
1943 ...	76	10	3	74	103
1942 ..	67	11	13	87	87

NOTE.—The figures for the current year are approximate only.
* Excluding outbreaks in Army Horses.